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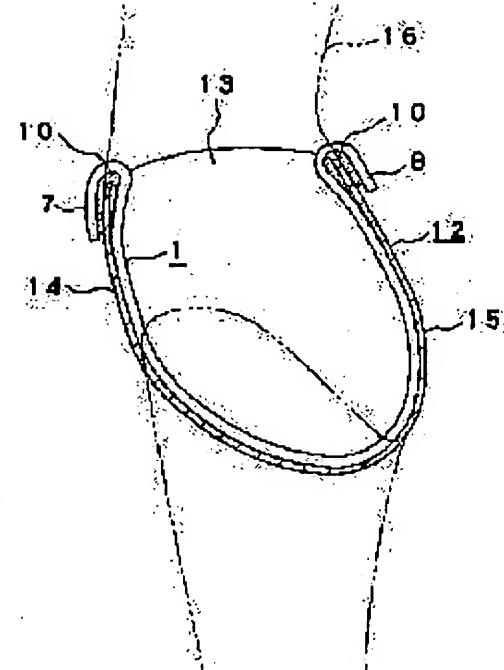
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## (54) BODY FLUID ABSORPTIVE ARTICLE

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To prevent the slippage between an absorptive article and a body fluid outflow part even when a pair of panties is shifted from the body, surely absorb the body fluid and prevent the horizontal leakage of the body fluid by forming both longitudinal ends into a length protruding outward from the body opening of the panties, and forming an adhesive layer to be folded down and fixed to the outer surface of the panties.

**SOLUTION:** An absorbing body 1 has a body fluid absorbing structure formed by interposing an absorbing layer consisting of pulp or polymer absorbent between a body fluid permeable surface layer and a body fluid impermeable leakage preventing layer. The surface layer side is brought into contact with a body fluid outflow part, whereby the body fluid is absorbed in the absorbing layer through the surface layer. The absorbing body 1 is formed into a length such that end flaps 7, 8 on both end parts are protruded outward from a body opening part 13 on the upper end of a pair of panties 12. The release papers of adhesive layers 10 protruded out from the body opening part 13 are peeled to fold down and fix the adhesive layers 10 to the outer surface of the panties 12.



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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

#### [0001]

[Industrial Application] this invention -- a sanitary napkin and a vaginal discharge -- body fluid absorptivity goods, such as a sheet and a diaper for incontinentia, are started.

#### [0002]

[Description of the Prior Art] In what is conventionally used in such body fluid absorptivity goods, connecting with shorts etc., unifying body fluid absorptivity goods and shorts certainly is performed. For example, body fluid absorptivity goods tend to be attached firmly to the KUROTCHI section of shorts through a binder, and it is going to prevent gap of body fluid absorptivity goods etc. by unifying shorts and body fluid absorptivity goods certainly.

#### [0003]

[Problem(s) to be Solved by the Invention] However, when gap of shorts occurs in a length-from-the-crotch-to-the-cuff part by motion of the body at the time of wearing use of body fluid absorptivity goods, absorptivity goods also produce gap with shorts. Therefore, body fluid absorptivity goods could not respond to the outflow section of body fluid, but there was a case where horizontal leakage etc. was produced.

[0004] This invention tends to make it possible to prevent the horizontal leakage of body fluid etc. while it prevents gap with absorptivity goods and the body fluid outflow section and enables absorption of body fluid certainly by motion of the body, when gap arises between the shorts and the bodies with which it equipped, in order to solve the technical problem like \*\*\*\*.

#### [0005]

[Means for Solving the Problem] In the condition which equipped the inside of shorts with the absorption body equipped with body fluid absorption structure, in order that this invention may solve the technical problem like \*\*\*\*, it forms the adhesive layer for turning up and attaching firmly to the external surface of shorts in the external surface of this lobe, and changes while the both ends of the die-length direction form in the die length which can project outside from drum section opening of shorts.

[0006] Moreover, the absorption body equipped with body fluid absorption structure may infix the absorption layer of body fluid absorptivity between the surface layer which contacts the skin and penetrates body fluid, and the leak prevent layer which does not penetrate body fluid.

[0007] Moreover, an adhesive layer may be hung and formed inside drum section opening from the outside of drum section opening, and may not be formed in the location corresponding to the KUROTCHI section of shorts.

[0008] Moreover, an elasticity material may be arranged in the direction of both ends of an absorption body.

#### [0009]

[Function] Since it constitutes like \*\*\*\*, in order to equip the body with body fluid absorptivity goods, this invention is arranged so that the absorption body which carried out the surface layer inside may be put on the inside of shorts, and projects the both ends in the method of outside from drum section opening of shorts.

[0010] In this condition, the releasing paper of the adhesive layer formed in the both ends of an absorption body does not exfoliate, but is made into the condition of having covered the adhesive layer with the releasing paper. And the shorts which has arranged this absorption body inside is pulled up, after adjusting the protrusion

condition of the both ends of an absorption body suitably in the condition which contacted the body fluid outflow section in the surface layer, an adhesive layer is turned up to the method of outside, and an adhesive layer is attached firmly to the external surface of shorts. In this case, naturally the releasing paper which covers the adhesive layer mentioned above exfoliates, and is performed.

[0011] Thus, also when shorts produces a bodily front face and gap by movement of the body etc. by constituting, since an absorption body is not attached firmly to shorts and one in a KUROTCHI part, an absorptivity part does not follow in footsteps of gap [ shorts ]. Therefore, even if shorts produces a bodily front face and gap, absorptivity goods can absorb certainly the body fluid which does not shift from the outflow section of body fluid and flows out of the body fluid outflow section.

[0012] Moreover, although an adhesive layer should just have the amount and area which can be certainly attached firmly to the external surface of shorts, it is good also as what is formed in an absorption body so that an adhesive layer may be made to correspond to the external surface which minded drum section opening from the inside of shorts. Thus, if it forms, the connectability of an absorption body and shorts will become good, and it becomes possible to prevent omission of an absorption body etc. certainly.

[0013] Moreover, body fluid absorption structure can use a well-known configuration conventionally, and forms the absorption body by infixing the absorption layer of body fluid absorptivity between the surface layer of body fluid permeability, and the leak prevent layer of body fluid impermeability.

[0014]

[Example] If one example of this invention is explained in a drawing below, (1) is an absorption body, infixes and forms the absorption layer (4) which consists of pulp, a macromolecule absorbent, etc. between the surface layer (2) of body fluid permeability, and the leak prevent layer (3) of body fluid impermeability, and constitutes body fluid absorption structure. And by contacting a surface layer (2) side in the body fluid outflow section, absorption immobilization of the body fluid was carried out through the surface layer (2) at the absorption layer (4), and the outflow outside is prevented by the leak prevent layer (3).

[0015] Moreover, make the both sides of an absorption layer (4) face an absorption body (1), and it makes the both ends of an absorption layer (4) face a side flap (5) and (6), and forms a flap (7) and (8) by the surface layer (2) and the leak prevent layer (3). Moreover, elasticity materials, such as a latex, are used for end flap (7) and (8) part, and it is good for it also considering the wearing nature to the body as a good thing.

[0016] Moreover, the adhesive layer made from a binder (10) constituted by hot melt etc. is formed in the front face of the leak prevent layer (3) of an end flap (7) and (8). This adhesive layer (10) covers a front face with a releasing paper (11), and this releasing paper (11) is exfoliated and used only at the time of use. Moreover, the end flap (7) of both ends and (8) form this absorption body (1) in the die length which projects in the method of outside from drum section opening (13) of the upper limit of shorts (12) in the condition with which the inside of shorts (12) was equipped. And it constitutes so that it may exfoliate, and the releasing paper (11) of the adhesive layer (10) projected from drum section opening (13) to the method of outside may be turned up on the external surface of shorts (12) and can be attached firmly. And the die length of an absorption body (1) is formed in 50cm - 80cm, and sufficient cuff of the external surface of shorts (12) and a flap (7), and (8) is made possible.

[0017] Moreover, this adhesive layer (10) may not necessarily be attached firmly only to the external surface of shorts (12), and may be formed in the magnitude which applies outside from the inside of shorts and is arranged to both sides through drum section opening (13) of shorts (12). Thus, if it forms, the wearing nature of the absorption body (1) to shorts (12) will become good.

[0018] In what was constituted like \*\*\*\*, when using it, equipping shorts (12) with this, it arranges in the condition that the leak prevent layer (3) of an absorption body (1) is put on the inside of shorts (12). And physical relationship is arranged so that the both ends of an absorption body (1) can be projected from drum section opening (13) of shorts (12) to the method of outside.

[0019] After pulling up shorts in this condition and equipping the body, the amount of protrusions from drum section opening (13) of an absorption body (1) is adjusted suitably, and that lobe is turned up on the outside of drum section opening (13) in (15) a (14) and back bodice side a side at the predecessor time of shorts (12). Before this cuff, the releasing paper (11) which has covered the adhesive layer (10) is exfoliated, and an absorption body (1) is fixed to shorts (12) by the adhesive layer (10).

[0020] Thus, although firm attachment immobilization of the absorption body (1) is certainly carried out by constituting at the drum section opening (13) part of shorts, it is not fixed to shorts (12) in the KUROTCHI section corresponding to the outflow section of body fluid. Therefore, by movement of the body etc., also when shorts (12) shifts from a wearing person's (16)'s front face and the outflow section and the shorts (12) of body fluid shift especially, an absorption body (1) cannot follow in footsteps of a motion [ shorts (12) ], and the outflow section and the absorption body (1) of body fluid can maintain good contact physical relationship. Therefore, the horizontal leakage of body fluid etc. is not produced and it becomes usable [ a safe absorption body (1) ].

[0021] moreover -- although the case where equipped shorts (12) with the absorption body (1), and it was used as a sanitary napkin in the above-mentioned example was explained -- not necessarily -- as a sanitary napkin -- a vaginal discharge, and it is used as a panties liner etc. or, of course, is also used as putt for incontinentia -- it is possible. [ using it as a sheet ] Moreover, it is also possible by equipping the inside of the underwear for males to use it as male putt for incontinentia.

[0022] In this case, it becomes a natural possible thing not only shorts (12) but to use for the outdoor shoes for males. Although the outdoor shoes for males do not have the good fit nature to the body as compared with the shorts for women, it becomes possible through an adhesive layer (10) to carry out firm attachment immobilization certainly to drum section opening (13) of the outdoor shoes for males, and to make an absorption body (1) fit at the body of an absorption body (1) also in this case.

[0023] Moreover, in the one above-mentioned example, the area of an adhesive layer (10) is widely formed by making a center section narrow, as shown in drawing 2 and drawing 3 , and making the direction of both ends broad, and the configuration of this absorption body (1) also makes fit nature to the body good, while making good stability of the shorts in drum section opening (13) etc.

[0024] Moreover, as an absorption body (1) is shown in drawing 5 , it is [ in / a different example ] good also as what forms in the same width of face from an end to the other end, and decreases the amount of the member used.

[0025] Furthermore, in a different example, as shown in drawing 6 , by forming the end side of an absorption body (1) broadly, a leak prevent layer (3) can be formed widely, when there are many prolonged use at the time of sleep etc. or flows of body fluid, the covering surface product by the leak prevent layer (3) can be made [ in / many ], and positive prevention of horizontal leakage etc. can be enabled.

[0026]

[Effect of the Invention] Since this invention is constituted like \*\*\*\*, also when gap etc. arises by movement etc. between shorts and the body to wear, since a body fluid absorber cannot follow in footsteps of a motion [ shorts or outdoor shoes ] and can be certainly arranged in the outflow section of body fluid, it can prevent accident, such as horizontal leakage, certainly.

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CLAIMS

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## [Claim(s)]

[Claim 1] Body fluid absorptivity goods characterized by forming the adhesive layer for turning up and attaching firmly to the external surface of shorts in the external surface of this lobe while the both ends of the die-length direction formed in the die length which can project outside from drum section opening of shorts in the condition which equipped the inside of shorts with the absorption body equipped with body fluid absorption structure.

[Claim 2] The absorption bodies equipped with body fluid absorption structure are the body fluid absorptivity goods of claim 1 characterized by infixing the absorption layer of body fluid absorptivity between the surface layer which contacts the skin and penetrates body fluid, and the leak prevent layer which does not penetrate body fluid.

[Claim 3] Adhesive layers are the body fluid absorptivity goods of claim 1 characterized by hanging and forming inside drum section opening from the outside of drum section opening, and not forming in the location corresponding to the KUROTCHI section of shorts.

[Claim 4] Body fluid absorptivity goods of claim 1 characterized by having arranged the elasticity material in the direction of both ends of an absorption body.

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